

Planning Division  
Environmental Branch

AUG 16 1999

Mr. Tom Olds  
U.S. Fish and Wildlife Service  
Suite 111  
9549 Koger Boulevard, North  
St. Petersburg, Florida 33702-2440

Dear Mr. Olds:

The U.S. Army Corps of Engineers is working with the Sarasota Bay National Estuary Program to do some environmental restoration of some dredged material disposal islands and areas in and around Sarasota Bay. Maps showing the location of those areas are enclosed for identification purposes.

Mr. James Slack of the Vero Beach office of the U.S. Fish and Wildlife Service referred us to you as a point of contact with regard to the development of the Fish and Wildlife Coordination Act report (CAR) and the Section 7 consultation. A description of the work to be done on each of the 5 areas is enclosed to assist you in this work. Also included is a description for each of the sites in order for you to understand how each site will be restored.

The restoration of these disposal islands and areas is being done as an 1135 project. The Fish and Wildlife Service has agreed to be a partner in assisting with this restoration effort. We are asking that your office provide the CAR and Section 7 consultation as part of your partnership in order to keep costs to the project as low as possible.

The point of contact for this project is Mr. Annon I. Bozeman, telephone 904-232-1688.

Sincerely,

James C. Duck  
Chief, Planning Division

Enclosures

Bozeman/CESAJ-PD-ER/1688/als 208  
Dugger/CESAJ-PD-ER 8/2/99  
Smith/CESAJ-PD-E  
Gonzalez/CESAJ-DP-I  
Strain/CESAJ-PD-P  
Dugger/CESAJ-PD

L: group/pde/OLDS-FWS.DOC

## STUDY AREA

West Coast Inland Navigation District requested Federal assistance for Sarasota Bay to assist in achieving their comprehensive long-range goal of environmental restoration for the coastal lagoon system. Sarasota Bay is located on the central coast of Florida between Tampa and Venice, Florida. The system is bordered by a chain of coastal barrier islands (Anna Maria Island, Longboat Key, and Casey Key). The five priority habitat restoration sites for this project are located in lower Sarasota Bay.

The coastal wetlands and seagrass meadows in the Sarasota Bay region have been significantly impacted from the placement of dredge and fill placement from the Gulf Intracoastal Waterway (GIWW) during the late 1950s to early 1960s. The spoil areas represented the most economical locations for depositing spoil material and keeping the dredge's floating line to approximately 1,800 feet. The spoil material was placed so as to build islands visible to navigators, thus preventing dangerous shoals. Dredge material was frequently placed in mangroves and shallow water bay bottoms creating upland areas, which were invaded by exotic vegetation.

Past dredge and fill activities has also heavily impacted marine habitat. The loss of wetlands, especially shallow water habitats associated with mangroves and seagrass meadows, has reduced the available habitat for juvenile fisheries. An indicator of baywide impacts over the years is the fact that sea trout landings are 50 percent of that in 1950. Exotic vegetation such as Australian pine and Brazilian pepper has become a major concern particularly in the transitional wetlands and coastal inland.

The West Coast Inland Navigation District requested the U.S. Army Corps of Engineers to partially restore these islands. The restoration effort consists of removing exotic vegetation, excavating tidal channels and planting native vegetation. Select dredge material will be placed to help create beach dunes and coastal strand habitat. Five project sites will be modified.

1. Site #1 – Jim Neville Preserve - Jim Neville Preserve is 35-acre preserve owned by Sarasota County. A series of tidal lagoons will be constructed within the existing dredge disposal areas; an isthmus will connect the two main sectors at this site, see Figure 3. It is anticipated that work at this site will be carefully integrated with Palmer Point Park due to their proximity for economics in design and construction costs. Florida Department of Environmental Protection has identified a water-based access easement for this perimeter of the existing dredge disposal areas.

It is anticipated that most of the work at this site can be self-contained by maintaining or building berm(s) around the perimeter of the existing dredge disposal areas. These berm(s) will be left in place to minimize erosion to the island.



## 2. Site #2 - Palmer Point Park

Palmer Point is a 33-acre park owned by Sarasota County. It is located at the north end of Casey Key, the former site of Midnight Pass. This project involves removing a 5-acre dredge material island placed within the mangroves at Palmer Point. Sand will be moved hydraulically or mechanically and deposited on the beach. Project activities will enhance tidal circulation, restore mangrove and marsh wetlands and re-establish highly productive submerged habitat. Revegetation efforts will be augmented with volunteer assistance.

The work at this site will establish a 2.3-acre tidal lagoon with approximately 0.8-acres of mangrove wetlands and coastal strand habitat. This will assist the efforts being made to restore native plant communities. An estimated 24,000 cubic yards of sand will be removed hydraulically or mechanically and deposited on the beach at Casey Key. Casey Key will be a direct beneficiary of this project since it has been impacted by erosion.

## 3. Site #3 - Skiers' Island and Bird Colony Islands

Skiers' Island and the Bird Colony Islands are important colonial nesting sites. Skiers Island is an 8-acres island owned by West Coast Inland Navigation District. Bird Colony Islands are 4 small islands, approximately 2 acres in size, that constitutes one of the most significant bird colonies along Florida's West Coast. The islands have suffered substantial erosion primarily from large boat wakes. Rocky material dredged from Skiers' Island and Big Edwards Island will be transported to stabilize the islands. As part of the restoration effort, artificial reefs may be placed on a submerged swale to act as a breakwater further reducing erosion. The islands will be restored by stabilizing the shorelines utilizing plantings such as *Spartina alterniflora* and strategically placed riprap if needed. Minor riprap placement will also provide substrate for encrusting species.

Skiers' Island will be recontoured to construct a mangrove lagoon within the southern portion of the island. Dredge material will be deposited in deeper waters to construct grassy shoals adjacent to and east of the existing grass beds. An additional 7,260 cubic yards of material will be used to construct the shoal, creating about 1.8 acres of shallow water habitat for natural colonization of seagrasses. Some material will be consolidated at the north end of the island to create an upland hammock and a mound to provide habitat diversity.

Excavated material from Skiers' Island will be utilized to partially fill in an existing dredge hole, located north of, and adjacent to, Bird Colony Islands (at most one to two hundred feet away). Bird Colony Islands are located east of the GIWW. An approximate one-acre mangrove island will result within this area which will provide additional bird nesting habitat from what once before would have been a non-productive area. An interior lagoon created will provide additional ecotone and forage area for birds. Shoals will be created at elevations which will be conducive to seagrass recruitment and tie into the adjacent tidal flats. Seagrass coverage will be accelerated

via plantings. This will stabilize Bird Colony Islands and the created island will help offset the loss of nesting sites.

4. Site #4 - Big Edwards Island

Big Edwards Island is a 6-acre island owned by Sarasota County. It is located in Roberts Bay just south of the Siesta Key bridge. Historically, Big Edwards Island was a mangrove island utilized for disposal of dredge material from previous channel dredging operations, including construction of the IWW. The island will be recontoured to enhance wetland and native upland habitats, see Figure 8 and 9. Dredge material will be consolidated at the center of the island to facilitate restoration and to provide an overview of the surrounding Bay, Bird Colony islands, and the Little Edwards Island restoration site. Excavated material will be used to fill in the existing dredge hole mentioned in Site #3.

5. Site #5 – Snake Island

Snake Island is a spoil island located near Venice Inlet owned by West Coast Inland Navigation District. It was approximately 7 acres in size but over the years, this island has decreased to approximately 2 acres. This decline was due to the need to stabilize the shoreline and prevent silting in Venice Inlet. WCIND has tasked the Corps to study alternatives which would include preserving the archaeological site located on this island and methods to decrease further deterioration of this island. In addition, as a part of the current feasibility effort for other islands located in Sarasota Bay, the Corps will study the possibility of removing exotics and planting native vegetation to increase this island's habitat value.

A total of 51.1 acres of intertidal wetland habitat and shallow water habitat will be restored. Fisheries in adjacent habitats will be enhanced through the extensive increase in available shoreline and associated tidal circulation.





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

South Florida Ecological Services Office

P.O. Box 2676

Vero Beach, Florida 32961-2676



February 24, 2000

James C. Duck, Chief  
Planning Division  
Army Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Log No.: 4-1-00-I-387  
Project: Sarasota Bay Section 1135  
Feasibility Study  
County: Sarasota

Dear Mr. Duck:

The Fish and Wildlife Service (Service) has reviewed the Army Corps of Engineers' (Corps) most recent modified restoration plan for spoil island enhancement in Sarasota Bay. The project is in process under Section 1135 of the Water Resources Development Act of 1992. This draft report represents the Service's opinion on the effects of the proposed action in accordance with section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA) and with the Fish and Wildlife Coordination Act of 1958 (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) (FWCA).

### PROJECT HISTORY

The Service's assistance was first requested by the Corps by letter on October 21, 1993, for evaluation of habitat improvements in the restoration of three dredge spoil islands in Sarasota Bay, under the Coastal America Program/Section 1135 program. In our December 16, 1993 response, the Service stated that the proposal was an environmental benefit and expressed our willingness to coordinate. On August 22, 1997, we received a modified plan from the Corps including four sites targeted for restoration. We responded by letter on February 23, 1998, supporting the restoration efforts. On August 16, 1999, we received another modified plan from the Corps including five proposed restoration sites and requesting a Fish and Wildlife Coordination Act Report and section 7 consultation. To that end, we have now received and reviewed the January 4, 2000, Corps Memorandum of the October 28, 1998, public workshop, detailing the latest plans for what now entails six spoil island sites. We have also been able to review the recent design alternatives ("concepts") for each of these sites (completed in January)

on the Corps website for the Sarasota Bay project, which included necessary aerial photography and characterizations for a better remote evaluation.

## PROJECT DESCRIPTION

At present, the Sarasota Bay Section 1135 Feasibility Study includes Big Edwards Island, Jim Neville Preserve, Palmer Point Park, Skier's Island, Bird Colony Islands, and Snake Island. Each of these spoil island sites, with the exception of Bird Colony Islands, now has three associated restoration design concepts resulting from workshops including the Corps, Sarasota County, Sarasota Bay National Estuary Program, and Florida West Coast Inland Navigation District. These concepts include various combinations of restoration, enhancement, creation, preservation, and access elements. Specifically, proposed work includes exotic vegetation removal; mangrove and emergent/high marsh species establishment; sculpting tidal channels, lagoons, and mudflats; facilitating seagrass colonization; creating upland hammocks; and stabilizing substrate subject to erosion. Regarding the Bird Colony Islands, it is our understanding that no earthmoving activities will be taking place on these islands due to nesting sensitivity, however, the feasibility of limestone shoreline buffering for erosion control will be considered.

Project progression for Year 2000 includes preliminary design of a preferred alternative, including conceptual design, followed by preparation of an Environmental Assessment (EA). The draft EA will be presented in a public workshop and to commenting agencies, with the final EA and decision expected in late 2000.

## THREATENED AND ENDANGERED SPECIES

We have reviewed information submitted in previous plans as well as other information available to us on the presence of threatened and endangered species and designated critical habitat in the vicinity of the currently proposed project sites. Based on our review, five species have been observed (see assigned site numbers in Fish and Wildlife Resources section). The Corps has determined that the proposed project is not likely to adversely affect any of these species as listed below.

Piping plover (*Charadrius melodus*) - in vicinity of sites 2 and 3

The project may provide benefits to the piping plover through the creation of mudflats for foraging. We concur with the Corps that the proposed project is not likely to adversely affect the piping plover. Currently, there is no critical habitat designated for the piping plover; therefore, none will be affected.

West Indian manatee (*Trichechus manatus*) - in vicinity of all sites



The Corps has indicated that Standard Manatee Construction Precautions will be implemented during project activity. As such, we concur with the Corps that the proposed project is not likely to adversely affect the West Indian manatee. The project is within designated critical habitat for the manatee. Impacts to seagrasses as a result of vessel routing and maneuvering are expected to be minimal. Island access routes will be designed and coordinated with the Service. Therefore, we conclude that the project is not likely to adversely modify or destroy critical habitat of the West Indian manatee.

Loggerhead sea turtle (*Caretta caretta*) - in vicinity of all sites

Green sea turtle (*Chelonia mydas*) - in vicinity of all sites

Hawksbill sea turtle (*Eretmochelys imbricata*) - in vicinity of sites 1, 4, 5, 6

Sea turtle nesting has not been documented on any of the proposed project spoil islands. It is highly unlikely that turtles use any of these islands for nesting, given location and available sandy beach area. The Corps has indicated that if a sea turtle is observed in an area of project activity, project plans will include avoidance. We concur with the Corps that the proposed project is not likely to adversely affect the sea turtles listed above. Currently, there is no critical habitat designated for the loggerhead or green sea turtle, therefore, none will be affected. Currently, there is no critical habitat designated for the hawksbill sea turtle in the continental United States, therefore, none will be affected.

This written concurrence letter fulfills the requirements of section 7 of the ESA, and no further action is required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, if a new species is listed, or if designated critical habitat may be adversely affected by the project, reinitiation of consultation may be necessary.

### FISH AND WILDLIFE RESOURCES

Habitat types associated with environmental enhancement/creation include mangrove wetlands, emergent and high marshes, seagrasses, tidal lagoons, mudflats, seagrass beds, and upland hammocks. Associated fish and wildlife resources would in turn benefit. Due to an increase in desirable structure and feeding opportunities, bird utilization would be expected to increase with respect to individuals and number of species. These include colonial nesters such as herons, ibis, and pelicans as well as other avifauna such as shorebirds, raptors, and neotropical migrants. Fisheries would benefit from both an expansion of desirable detrital sources and benthic shallows for invertebrate growth and food chain support, as well as expanded refugia.

The Service generally supports the environmental enhancement elements as shown for each of the concepts for each of the six subject spoil sites. In light of our focus on trust resources, we would like to see concepts selected for each site which would maximize fish and wildlife utilization in a manner which would best serve the ecosystem of Sarasota Bay. Habitat diversity is a consideration. Another consideration would be to ensure attention to a particular



habitat/species which has experienced degradation/decline relative to other habitats or species in Sarasota Bay. Special attention to benefits to threatened or endangered species is important; for instance, mudflats for piping plover foraging. We offer the following preferences in site concepts, given the information available to us at this time:

1. Big Edwards Island

Concept #2 offers habitat diversity, without an array of boardwalks and outlooks.

2. Jim Neville Marine Preserve Island

Concept #1 offers diversity with an interior connection for the lagoon/flats.

3. Palmer Point Park

Concepts #1 and #2 incorporate desirable habitat mixes.

4. Skier's Island

Concept #3 offers a habitat balance and best lagoon connectivity. An adequate mangrove buffer and/or other shoreline stabilization should be established at the waterward base of the northern upland for erosion control.

5. Bird Colony Island

A limerock shoreline buffer may provide protection needed from boat wakes.

6. Snake Island

Concept #2 offers adequate diversity without involving island enlargement. Due to the high energy setting, shoreline stabilization will be necessary for preservation.

### SUMMARY AND RECOMMENDATIONS

In summary, the Service supports the Sarasota Bay Section 1135 Ecosystem Restoration Feasibility Study and will continue to participate with the Corps, as resources allow, in project progression.

With respect to all sites reviewed above, we will evaluate new information as this project progresses through planning stages. We will remain flexible with our concept preference in order to accommodate new information and design detail refinements or changes. As the project progresses, we would like to request more detail regarding the following:

- proposed characterizations and species composition of upland enhancement areas. At present, we are assuming primarily maritime hammock.
- sediment/turbidity control details to be associated with earthwork.

- island perimeter seagrass and bathymetry mapping and dependent construction barge/vessel access routes.
- proposed dredge hole filling and seagrass shelf/mangrove island creation details (vicinity of Skier's Island), including area seagrass and bathymetry mapping, barge routes, and turbidity control.
- monitoring plans and assurances for long term maintenance of all sites.

We are available to meet with project representatives to continue coordination toward the completion of this ecosystem restoration project. If you have any questions, please contact Brad Rieck at (561) 562-3909, extension 231, regarding the findings and recommendations contained in this report.

Sincerely yours,

*Kalani D. Cairns*

for James J. Slack  
Project Leader  
South Florida Ecological Services Office

cc:  
NMFS, Panama City, FL  
FWCC, Punta Gorda, FL





# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
South Florida Ecological Services Office

P.O. Box 2676

Vero Beach, Florida 32961-2676

February 24, 2000

Mark Thompson  
National Marine Fisheries Service  
3500 Dellwood Beach Drive  
Panama City, Florida 32408

Dear Mr. Thompson:

The Fish and Wildlife Service is providing you with a Draft Fish and Wildlife Coordination Act Report on the Sarasota Bay Section 1135 Feasibility Study, Sarasota County, Florida. Please review the report and provide us with your comments or concurrence by March 24, 2000.

Sincerely yours,

*Kalani D. Cairns*

*for* James J. Slack  
Project Leader

South Florida Ecological Services Office

cc:

FWCC, Punta Gorda, FL  
Corps, Jacksonville, FL



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

South Florida Ecological Services Office

P.O. Box 2676

Vero Beach, Florida 32961-2676

February 24, 2000

James Beever

Florida Fish and Wildlife Conservation Commission

29200 Tuckers Grade

Punta Gorda, FL 33955

Dear Mr. Beever:

The Fish and Wildlife Service is providing you with a Draft Fish and Wildlife Coordination Act Report on the Sarasota Bay Section 1135 Feasibility Study, Sarasota County, Florida. Please review the report and provide us with your comments or concurrence by March 24.

Sincerely yours,

*Kalani D. Cairns*

*for*

James J. Slack  
Project Leader

South Florida Ecological Services Office

cc:

NMFS, Panama City, FL  
Corps, Jacksonville, FL







**To** File: 09162-004-096  
**From** Jeannie Hunt  
**CC:** Meeting Attendees; Chuck Listowski  
**Date** April 7, 2000

**SUBJECT** **SARASOTA ECOSYSTEM RESTORATION REPORT**  
Meeting Minutes from the April 4, 2000 Environmental Agency  
Coordination Meeting

An environmental agency coordination meeting was held on April 4, 2000 relating to the Sarasota Ecosystem Restoration Project at HDR in Tampa. The meeting was attended by:

Alberto Gonzalez	ACE	Dean Mades	Ed Barber and Associates
Tiphannie Jinks	ACE	Rich Paul	National Audubon Society
Bruce Hasbrouck	HDR	Ann Schnapf	National Audubon Society
Jeannie Hunt	HDR	Alan Burdett	FDEP
Eric Sutton	Sarasota County	Cece Featheringil	FDEP
		Eric Summa	ACE - Regulatory

#### Meeting Notes

The following is a summary of the issues raised during the meeting.

1. Bruce Hasbrouck gave a description and the history of the project, including information regarding the public involvement of the project and the upcoming schedule.
2. HDR presented the concepts that were developed by the HDR team and those developed in response to information received at the public workshops.
3. Rich Paul asked if the tidal lagoons presented on many of the concepts had been modeled to see if they work and will not silt in. Bruce stated that some initial investigations regarding flow have been looked at. However, detailed modeling will be completed during the design phase.
4. Alan Burdett, Rich Paul, and Ann Schnapf all expressed their interest in utilizing excess material to stabilize the bird colonial islands. Alan suggested this should occur on the backside of these islands. He stated that DEP is currently mapping seagrasses around these islands, which should help determine where fill can be placed without impacting sea grass beds.
5. Eric Suma suggested that we coordinate with David Dale from the National Marine Fisheries regarding Essential Fish Habitat.

6. Discussion regarding the disposal of material came up regarding several of the spoil island concepts. Alan Burdett mentioned that he has some contacts that may be able to help provide some solutions.
7. Rich Paul brought up the issue of maintenance on the upland areas. Bruce indicated that maintenance agreements will be identified as part of the 1135 process and specific issues will be resolved during the design phase.
8. In discussing Skier's Island, Alan Burdett suggested that the island be split into two lobes by a tidal lagoon, allowing for public access on the north lobe and keeping the south end as mangroves for bird nesting.
9. Also in discussing Skier's Island, Rich Paul stated that mature mangroves would provide a substantial windbreak for those interested in skiing around the island.
10. In general, Eric Suma suggested that any opportunity for creation of high marsh or saltern is good, since these are unique systems lacking in the Bay. He also recognized that a diversity of systems is also good.
11. In discussing the Jim Neville Marine Preserve, Ann Schnapf discussed the importance of salterns and their unique biological function. Regarding permitability, Eric Suma suggested that since alternatives exist that minimize impacts to mangroves, these alternatives (2 and 5) may be more favorable during the permitting phase, because they minimize impacts to mangroves.
12. A concern was expressed regarding the proposed tidal lagoons in the Jim Neville Marine Preserve regarding motorized watercraft such as jet skis. Alan suggested that things can be done to restrict access to these tidal lagoons for jet skis. He suggested the County create an ordinance prohibiting motorized craft from entering the tidal lagoons.